

Appl. No. 09/867,893
Amendment and/or Response
Reply to Office action of 13 October 2004

Page 2 of 8

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) A data carrier for the communication of communication data with a base station, comprising:

processing means for the processing of communicated communication data, and
voltage supply means which are arranged to receive an external supply voltage applied to the data carrier during a charging time interval until a turn-on instant and which are adapted to supply an internal supply voltage to the processing means, decoupled from the external supply voltage, during a consumption time interval starting at the turn-on instant, the processing means being adapted to interrupt the processing from an interruption instant, when the internal supply voltage decreases below a threshold voltage, until the turn-on instant,

characterized in that there are provided time measurement means which are adapted to measure a processing time interval defined as the time interval from the turn-on instant until the interruption instant, and the voltage supply means are adapted to adapt the consumption time interval to the measured processing time interval.

2. (Previously presented) A data carrier as claimed in claim 1, characterized in that the voltage supply means are adapted to reduce the consumption time interval stepwise when the consumption time interval is longer than the processing time interval.

3. (Previously presented) A data carrier as claimed in claim 1, characterized in that the voltage supply means are adapted to prolong the consumption time interval to a nominal consumption time interval when the internal supply voltage does not decrease below the threshold voltage during the consumption time interval.

Appl. No. 09/867,893
Amendment and/or Response
Reply to Office action of 13 October 2004

Page 3 of 8

4. (Previously presented) A data carrier as claimed in claim 1, characterized in that the voltage supply means are adapted to prolong the consumption time interval to a random consumption time interval selected at random from a plurality of possible nominal consumption time intervals when the internal supply voltage does not decrease below the threshold voltage during the consumption time interval.

5. (Previously presented) A data carrier as claimed in claim 1, characterized in that memory means are adapted to store power information characteristic of the power consumption of the processing means during the execution of processing steps of the processing program, and the voltage supply means are adapted to define the consumption time interval in accordance with the power information stored for the next processing steps to be executed.

6. (Previously presented) A device comprising:

a processor that is configured to process data,

a capacitor that is configured to provide power to the processor, and

a controller that is configured to:

decouple the capacitor from a power source at a first time,

monitor a voltage on the capacitor and interrupt the processor at a second time after the first time if the voltage on the capacitor falls to a first voltage level,

discharge the capacitor at a third time after the first time, and

couple the capacitor to the power source at a fourth time after the third time, so that power consumed by the processor between the first and third times is substantially masked from power provided by the power source, and

wherein

the third time is dependent upon an interval between the second and third times of a prior sequence of interrupting the processor and discharging the capacitor.

Appl. No. 09/867,893
Amendment and/or Response
Reply to Office action of 13 October 2004

Page 4 of 8

7. (Previously presented) The device of claim 7, further including
a counter that is configured to measure the interval between the second and third times.
8. (Previously presented) The device of claim 7, further including
a memory that is configured to store parameters based on the interval between the second and third times.
9. (Previously presented) The device of claim 7, wherein
the third time is also dependent upon a random variable.
10. (Currently amended) A method of masking power consumption of a processor comprising:
decoupling an internal power source from an external power source at a first time,
monitoring a voltage on the internal power source and interrupting the processor at a second time after the first time if the voltage on the internal power source falls to a first voltage level,
reducing the voltage on the internal power source at a third time after the first time, and
coupling the internal power source to the external power source at a fourth time after the third time, so that power consumed by the processor between the first and third times is substantially masked from power provided by the external power source, and,
modifying the third time for a subsequent repetition of the method, based on an interval between the second time and the third time.
11. (Previously presented) The method of claim 10, further including
counting to measure the interval between the second and third times.

Appl. No. 09/867,893
Amendment and/or Response
Reply to Office action of 13 October 2004

Page 5 of 8

12. (Previously presented) The method of claim 10, further including
storing parameters in a memory, based on intervals between the second and third
times of other repetitions of the method.

13. (Previously presented) The method of claim 10, wherein
modifying the third time is also dependent upon a random variable.